Special Issue

Air Pollution: Emission Characteristics and Formation Mechanisms

Message from the Guest Editors

Air pollution remains a significant global environmental issue, profoundly impacting human health and atmospheric processes. This Special Issue, titled "Air Pollution: Emission Characteristics and Formation Mechanisms", aims to showcase recent advancements to further our understanding of the sources, emission patterns, and formation mechanisms of key air pollutants. We welcome contributions that investigate the emission characteristics of primary air pollutants, from both anthropogenic and natural sources. Studies focusing on spatiotemporal variations of emissions, the influence of land use and meteorological factors, and region-specific emission patterns are particularly encouraged. In addition, this Special Issue seeks to highlight research on the chemical and physical processes driving the formation, transformation, and accumulation of secondary pollutants such as ozone (O3) and fine particulate matter (PM2.5). Submissions addressing the complex interactions between precursors, meteorological conditions, and atmospheric dynamics and analyzing the causes of heavy pollution episodes are highly welcome.

Guest Editors

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Message from the Editor-in-Chief

Continued developments in instrumentation and modeling have driven atmospheric science to become increasingly more complex with a deeper understanding of concepts, mechanisms, and interactions. This is the field that innovation built and it has led to a better appreciation for the complexity with atmosphere. Human life is intertwined in this complexity as we strive to better understand our atmosphere. Climate change is constantly stretching the limits of our thinking and forcing new ideas and concepts to be played out. Welcome to the Anthropocene!

Editor-in-Chief

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